

REMARKS

Claim 115, 118-126, 138, 141, 161, and 162 are pending. Claims 115 and 119-122 were indicated to be allowable in the Office Action of July 19, 2000 subject to interferences with U.S. Patent Nos. 5,878,193 and 5,855,583. Per a Communication dated September 30, 2002, Decisions in Interference Nos. 104,644 (with the '193 patent) and 104,645 (with the '583 patent) were favorable to the Applicant of the present application, and *ex parte* prosecution is resumed. Hence, claims 115, and 119-122 remain allowable.

Per the Office Action of July 19, 2000, claims 118, 123-126, 138, and 141 were rejected as allegedly being unpatentable over the cited art, while claim 139 was indicated as defining patentable subject matter, but was objected to as depending from non-allowed base claim 138. All of the elements of indicated allowable claim 139 have been incorporated into independent claim 138 from which it previously depended, so that claim 138 is now in condition for allowance. Claim 118 has been amended to depend from claim 138, while claim 123 has been amended to depend from allowed claim 115. Claim 144 has been canceled pursuant to Interference No. 104,643, and claims 124-126 depend from claim 123, which now depends from allowed claim 115.

Applicant notes that claim 28 of sister application 09/602,627 corresponds with amended claim 139. That claim was rejected solely on double patenting grounds in light of current claim 139.

Added claims 161 and 162 depend (directly or indirectly) from allowed independent claims 115 and 119, respectively. Support for these added claims is found throughout the originally filed application, and particularly in Figs. 7, 9, 10, and 11, along with the associated text.

INFORMATION DISCLOSURE STATEMENT

Applicant notes that at least one Information Disclosure Statement will be filed shortly under separate cover, along with associated documents. Applicant intends to have these documents hand-delivered for the convenience of the Examiner, and to expedite issuance of this application.

PHILIP S. GREEN
Application No.: 08/709,930
Page 6

PATENT

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance and an action to that end is urged. If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, please call the undersigned at 650-326-2400.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

118. (Amended) The system of claim 138, wherein the input device has a handle, and [A medical robotic system, comprising:

a robotic arm;

a coupler that pivotally attaches to the arm;

an endoscopic surgical instrument that is held by said coupler; and

a controller having a handle, the controller in electrical communication with the robotic arm; and]

wherein movement at the input device [controller] produces a proportional movement of the [robotic arm and] surgical instrument.

123. (Amended) The method of claim 115, further comprising:[A method for operating a surgical robotic system for performing a surgical procedure on a patient, the method comprising:]

1) providing a first articulate arm, a controller and an input device which receives input commands, the first articulate arm in electrical communication with the controller and the controller in electrical communication with the input device;

2) cutting at least one incision into a [the] patient;

3) attaching the [a] surgical instrument to the first articulate arm, the surgical instrument having a shaft supporting the surgical instrument tip;

4) inserting said surgical instrument into the patient through the at least one incision such that a first portion of the shaft is outside the patient and a second portion of the shaft is inside the patient;

5) generating movement [input] commands to move said surgical instrument in accordance with a surgical [the] procedure being performed, wherein said first articulate arm moves said surgical instrument in accordance with the movement [input] commands such that said first portion of the shaft and said second portion of the shaft move; and

6) removing the surgical instrument from the patient.

138. (Amended) A system that allows a user to control a movement of a surgical instrument, wherein the surgical instrument is coupled to a display device that displays an object, comprising:

a mechanism that moves the surgical instrument, said mechanism having an original position and including a first linkage arm coupled to the surgical instrument and a first actuator which can rotate said first linkage arm and the surgical instrument in a plane perpendicular to a first axis, said first actuator being coupled to a linear actuator which can translate said first linkage arm along an axis parallel with the first axis;

an input device that receives a command to move the surgical instrument in a desired direction relative to the object displayed by the display device; and,

a controller that receives said command to move the surgical instrument in the desired direction, computes a movement of said mechanism based on said command and the original position of said mechanism so that the surgical instrument moves in the desired direction, and provides output signals to said mechanism to move said mechanism said computed movement to move the surgical instrument in the desired direction commanded by the user.

Please cancel claim 139.

141. (Amended) The system as recited in claim 138, wherein said controller is a computer which receives input signals from said input device and provides output signals to said controller to move **[the position of]** the surgical instrument.

Please cancel claim 144.

Please add claims 161 and 162 as follows:

161. (New) The method of claim 123, further comprising:
inputting the commands by moving a handle, the handle supported by an input linkage and having a sensor, wherein the surgical instrument comprises an articulable surgical instrument having a wrist joint coupling the shaft to the surgical instrument tip, wherein said

first articulate arm moves said surgical instrument while the first portion of the shaft is outside the patient and the second portion of the shaft is inside the patient by rotating the shaft about an axis of the shaft, by translating the shaft along the axis of the shaft, and by articulating the wrist joint within the patient, the surgical instrument movement proportional with the handle movement; and

operating a joint coupling a first tip structure and a second tip structure of the surgical instrument by actuating the sensor of the handle.

162. (New) The system of claim 119, wherein the articulable surgical instrument comprises a shaft coupled to a surgical instrument tip by a wrist joint, the articulable surgical instrument insertable into a patient via an incision such that a first portion of the shaft is outside the patient and a second portion of the shaft is inside the patient; wherein the handle has a sensor and is supported by a linkage, wherein movement of the handle produces rotation of said first portion of the shaft and the second portion of the shaft about an axis of the shaft extending through the incision, translation of said shaft along the axis, and articulation of said wrist joint, and wherein actuation of the sensor of the handle produces operation of the surgical instrument tip.